Ø 016/019

Attorney Docket No.: 0160112

Application Serial No.: 10/799,5 RECEIVED

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REMARKS

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This is in response to the *Non-Final* Office Action of June 25, 2007, where the Examiner has rejected claims 1-52. By the present amendment, applicant has amended claims 1, 13, 15, 17, 29, 31, 33, 40, 49 and 52, cancelled claims 12, 14, 16, 28, 30, 32, 37, 38, 44, 45, 47 and 50, and added new claims 53-56. After the present amendment, claims 1-11, 13, 15, 17-27, 29, 31, 33-36, 39-43, 46, 48, 49 and 51-56 remain pending in the present application. An early allowance of outstanding claims 1-11, 13, 15, 17-27, 29, 31, 33-36, 39-43, 46, 48, 49 and 51-56 in view of the following remarks is requested.

A. Rejection of Claims 1-5, 7-21, 23-38 and 40-45 under 35 USC § 103(a)

The Examiner has rejected claims 1-5, 7-21, 23-38 and 40-45, under 35 USC § 103(a), as being unpatentable over Bergstrom, et al. (USPN 5,809,459) ("Bergstrom") in view of Kaajas, et al. (PGPUB 2004/0138874) ("Kaajas").

Applicant respectfully disagrees; however, in order to expedite the prosecution of the present application, applicant has amended claim 1 to recite "decomposing said input speech into a voiced portion and a noise portion using an adaptive separation component <u>having a filter cut-off frequency</u>; ... <u>transmitting said first set of parameters</u>, said second set of parameters and a <u>voicing index to a decoder</u>, wherein said voicing index provides said filter cut-off frequency to said decoder for signal composition."

Applicant respectfully submits that, as acknowledged by the Examiner, Bergstrom and Kaajas fail to disclose, teach or suggest the elements of claim 1, as amended. However, applicant would like to point out that in rejecting cancelled claim 47, which recited "transmitting a voicing index to a decoder, wherein said voicing index provides filter cut-off frequency for

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signal decomposition," the Examiner relied on Kingsbury, et al. (USPN 6,308,155) ("Kingsbury").

It is respectfully submitted that, first, Kingsbury is directed to an automatic speech recognition system, and not a speech coding system. Applicant respectfully submits that Kingsbury does not disclose, teach or suggest transmitting a <u>voicing index</u> to a <u>decoder</u>, wherein the voicing index <u>provides the filter cut-off frequency to the decoder</u> for <u>signal composition</u>. The cited portion of Kingsbury at column 2, lines 3-14, reads as follows:

The feature generator preferably is configured to compute short-term spectral parameters of the speech signal. The feature generator preferably is configured to compute parameters of an auditory-like spectrum. The filter system preferably includes one or more linear tilters. In one embodiment, the filter system includes a lowpass filter and a bandpass filter configured to operate in parallel. The lowpass filter may be characterized by a cutoff frequency of about 8 Hz and the bandpass filter may be characterized by a passband of about 8 Hz. The lowpass filter may be characterized by a passband of about 8 Hz. The lowpass filter may be characterized by a passband of about 8 Hz. The lowpass filter may be characterized by a passband of about 8 Hz. The lowpass filter may be characterized by a passband of about 8 Hz. The lowpass filter may be characterized by a passband of about 8 Hz. The lowpass filter may be characterized by a passband of about 8 Hz. The lowpass filter may be characterized by a passband of about 8 Hz. The lowpass filter may be characterized by a passband of about 8 Hz.

It is respectfully submitted that Kingsbury merely discusses filters that are applied to the speech signal for speech recognition, and there is no disclosure in Kingsbury that a voice index or any information about the filters is transmitted to a decoder, let alone providing the filter information to a decoder for composing noise and voice portions.

Even more, it is respectfully submitted that there is no teaching or suggestion in the cited references to decompose the input speech into a voiced portion and a noise portion using an adaptive separation component having a filter cut-off frequency to generate a set of voice parameters using closed-loop and to generate a set of noise parameters using open-loop, and then providing a voice index indicative of the filter cut-off frequency for signal composition along with voice parameters and noise parameters generated according to the above scheme.

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Accordingly, applicant respectfully submits that claim 1, as amended, is patentably

distinguishable over the cited references, and should be allowed. Further, claims 1-11, 13, 15, 48

and 49 depend from claim 1, and should be allowed at least for the same reasons stated above.

Also, independent claims 17, 33 and 40, as amended, include limitations similar to those of claim

1, as amended, and should be allowed for similar reasons. Claims 18-27, 29, 31, 34-36, 39, 41-

43, 46 and 51-56 depend from claims 17, 33 and 40, as amended, and should also be allowed.

B. Rejection of Claims 6, 22, 39, 46-48 and 50-51 under 35 USC § 103(a)

The Examiner has rejected claims 6, 22, 39, 46-48 and 50-51, under 35 USC § 103(a), as

being unpatentable over Bergstrom in view of Kaajas, and further in view of Kingsbury, et al.

(USPN 6,308,155) ("Kingsbury").

It is respectfully submitted that, as explained above, dependent claims 6, 22, 39, 46, 48

and 51 should also be allowed at least for the reasons stated above in conjunction with

patentability of the independent claims.

C. Rejection of Claims 49 and 52 under 35 USC § 103(a)

The Examiner has rejected claims 49 and 52, under 35 USC § 103(a), as being

unpatentable over Bergstrom in view of Kaajas and Kingsbury, and further in view of Li, et al.

(PGPUB 2007/0110042) ("Li").

It is respectfully submitted that, as explained above, dependent claims 49 and 52 should

also be allowed at least for the reasons stated above in conjunction with patentability of the

independent claims.

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D. New Claims 53-56

By the present amendment, applicant has added new dependent claims 53-54 and 55-56, which include limitations similar to those of claims 48-49. Applicant respectfully submits that no new matter has been added, and claims 53-56 should also be allowed for the reasons stated above.

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E. Conclusion

Based on the foregoing reasons, an early Notice of Allowance directed to all claims 1-11, 13, 15, 17-27, 29, 31, 33-36, 39-43, 46, 48, 49 and 51-56 pending in the present application is respectfully requested.

Respectfully Submitted, FARJAMI & FARJAMI LLP

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Date

8300, on the date stated below.

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